

**Notice of Allowability****Application No.**

10/743,533

**Examiner**

ANTHONY MACKOWEY

**Applicant(s)**

MURATANI, HIROFUMI

**Art Unit**

2624

**- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 15 July 2009.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of the:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 12/23/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 7/30/09
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

/Brian P. Werner/  
Supervisory Patent Examiner, Art Unit 2624

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard Burgujian (Reg. No. 31,744) on July 30, 2009.

The application has been amended as follows:

- Claim 1 at line 3, delete "including input terminals"
- Claim 10 at line 3, delete "including input terminals"

### ***Statement of Reasons for Allowance***

The following is an examiner's statement of reasons for allowance:

Applicant's arguments, filed July 15, 2009, with respect to the rejection of claims 1-18 under 35 U.S.C. 101 have been considered. Upon further review and consideration of the disclosure and claims, examiner notes a "processor" was recited in claim 1 and 10 (line 2), and it is clear that when the embedding or detecting apparatus is realized by software (program), it is a computer executing functions according to the instructions of the program which realizes the functions corresponding to the claimed units (page 45, lines 7-18), thus the "units" are not embodied as pure software as was previously indicated, but are a combination of the program and the computer executing the program. The rejection of claims 1-18 under 35 U.S.C.101 has been withdrawn.

Applicant's arguments, filed July 15, 2009, with respect to the rejection of claims 1-22 under 35 U.S.C. 103 have been fully considered and are persuasive. Amendments to 1, 10, 19, 20, 21 and 22 further define the randomizing, ordering, and mapping functions. The rejection of claims 1-22 under 35 U.S.C. 103 have been withdrawn.

Claim 1 as currently amended recites, "function randomization unit coupled to the function generation unit, the function randomizing unit being configured to generate, based on the key information, a randomizing function, map each block of the target content to a target space based on the randomizing function, the target space comprising embedding amounts, and compute a composite function based on the randomizing function and the topological function".

Claims 19 and 21 are drawn to a method and computer readable medium storing a program for implementing the method respectively, reciting steps analogous to the unit functions recited in claim 1.

Claim 10 as currently amended recites, "a function ordering unit coupled to the function detection unit, the function ordering unit being configured to generate, based on the key information, an ordering function, map each block of the acquired target content with embedded digital watermark information to a randomized space comprising embedding amounts, and compute a composite function based on the ordering function and the embedded function".

Claims 20 and 22 are drawn to a method and computer readable medium storing a program for implementing the method respectively, reciting steps analogous to the unit functions recited in claim 10.

The above features, as explicitly recited, in combination with the other elements of the claims are neither disclosed nor suggested by the closest prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY MACKOWEY whose telephone number is (571)272-7425. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Werner can be reached on (571)272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AM  
7/31/09

/Brian P. Werner/  
Supervisory Patent Examiner, Art Unit 2624